

What is claimed is:

- 1 1. In a chain drive device having a driving shaft, and a driven shaft, coupled together by an
2 endless chain, a method comprising the steps of:
3 providing a phaser being interposed between the driving shaft and the
4 driven shaft; and
5 changing the oscillation rate of the phaser about at least one engine speed
6 range;
7 thereby reducing undue tension on the endless chain.
- 1 2. The method of claim 1, wherein the phaser comprises a rotor, a housing, and a
2 spool valve for controlling the relative movement between the rotor and the
3 housing.
- 1 3. The method of claim 2, wherein the changing step includes using a variable force
2 solenoid for applying a different dither frequency upon the spool valve for
3 reducing the tension on the endless chain.
- 1 4. The method of claim 1, wherein the chain drive device is used in a CTA VCT system.
- 1 5. The method of claim 1, wherein the chain drive device is used in an OPA VCT system.
- 1 6. The method of claim 1, wherein the chain drive device is used in a TA VCT system.